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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,704	02/06/2004	Armin Diez	HOG610C	8289
7590 07/31/2006			EXAMINER	
Edward J. Timmer P.O. Box 770 Richland, MI 49083-0770			LEE, GILBERT Y	
			ART UNIT	PAPER NUMBER
			3673	

DATE MAILED: 07/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/773,704

Applicant(s)

DIEZ ET AL.

Examiner

Gilbert Y. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 24, 26 and 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24, 26 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. The amendment filed 5/26/06 has been entered.
2. Upon further consideration, a new non-final action on the merits is set forth below.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 24, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyaoh (US Patent No. 5,961,126) in view of Ishikawa et al. (US Patent No. 5,427,389).

Regarding claim 24, the Miyaoh reference discloses a cylinder head gasket (Fig. 3) with a gasket plate (e.g. A10, A11, and A12) being metallic (Col. 2, Lines 43-48), said gasket plate comprising at least one sheet metal layer (A12) and having several combustion chamber openings (Hc), each of said combustion chamber openings being surrounded by at least one first bead (A16) and having a spring rate so as to be elastically deformable in height (Col. 3, Lines 58 and 59), wherein for delimiting the elastic deformation of said first bead at least one delimiting device (A12a) is associated

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with each of the said first beads, surrounding the respective combustion chamber opening and being obtained by deformation of a sheet metal layer of said gasket plate (Fig. 3) such that

(a) said delimiting device is formed by at least one second bead of said deformed sheet metal layer (Fig. 3), said second bead having a spring rate (Col. 3, Lines 54-58);

(b) all around the respective combustion chamber opening the spring rate of the second bead being greater than the spring rate of the associated first bead when measured perpendicularly to said gasket plate (Note that this is inherent because the height of the second bead is smaller than the height of the first bead while being made of the same material);

(c) in plan view of said gasket plate, the second bead is disposed between the associated combustion chamber opening and the associated first bead (Fig. 3);

(d) the height of the second bead being selected so as to allow an elastic deformation of the associated first bead (Fig. 3); and

(e) in a plan view of the deformed sheet metal layer, the total area occupied by the second bead is at least equal to half of the total area occupied by said delimiting device (Fig. 3).

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However, the Miyaoh reference fails to explicitly disclose in a plan view of said deformed sheet metal layer, surrounding the associated combustion chamber opening substantially completely and forming over at least part of the length of said second bead a substantially complete meander extending in a circumferential direction of said combustion chamber opening.

The Ishikawa et al. reference, a metal laminate gasket, discloses that a bead can be made to meander in a plan view (Col. 4, Lines 7-12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a meandering bead to the Miyaoh reference in order to widely cover the lateral side portions (Ishikawa et al., Col. 2, Lines 33-36).

Regarding claim 26, the Miyaoh reference, as modified in claim 24, discloses the thickness of a portion of said layer formed the second being substantially the same as a thickness of the material of the deformed layer adjacent the second bead (Fig. 3).

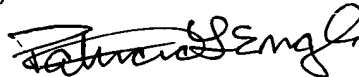
Regarding claim 27, the Miyaoh reference, as modified in claim 24, discloses the height of the second bead being selected such that when the gasket is tightened, the first bead is initially compressed without compression of the second bead (Fig. 3).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gilbert Y. Lee whose telephone number is 571-272-5894. The examiner can normally be reached on 8:00 - 4:30, M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia L. Engle can be reached on (571)272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Patricia Engle  
SPE  
Art Unit 3673

GL  
7/22/06